

ABSTRACT OF THE DISCLOSURE

A plasma processing apparatus includes, in order to efficiently cool an insulating plate having a relatively low thermal conductivity, a process chamber, the insulating plate divided into a plurality of regions and attached airtightly to the ceiling of the process chamber, a planar antenna member placed above the insulating plate and including microwave radiation holes for transmitting therethrough microwave used for generating plasma, and a support frame member supporting the insulating plate divided into a plurality of regions and including a heat medium path for flowing a heat medium along a line by which the insulating plate is divided into a plurality of regions and along a peripheral part of the insulating plate.

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